REMARKS

This amendment after final is in response to the office action mailed October 29, 2003 for the above-identified patent application, directed to a cooling package for an agricultural combine.

On behalf of Applicants, the undersigned agent thanks the Examiner for courtesies extended during the telephone interview of November 19, 2003.

Claims 1-13 stand rejected under 35 U.S.C. §§ 102, 103, and 112. In addition, the Examiner has objected to the drawings and the claims. The claims are amended as shown above to overcome the rejections and objections. Corrected drawings are submitted herewith to overcome the objections to the drawings.

This amendment should be entered because it places the application in condition for allowance or in better form for consideration on appeal, if necessary, see 37 CFR 1.116(b) and MPEP 714.12.

The objections and rejections are discussed in generally the same order as in the office action.

Specification

The "Brief Description Of The Several Views Of The Drawings" section has been amended as shown above to correct inadvertent errors in the original disclosure. The correction to the descriptions of FIGS. 3 and 4 does not constitute new matter under 35 U.S.C. § 132 because the error was administrative in nature and it is clear from the original drawings and description that FIG. 3 is the "cross-sectional view of the frame and the inwardly extending flange with the foam tape and the subassembly in place" and that FIG. 4 is the "top cross-sectional view of the assembled cooling package."

Drawings

The Examiner has disapproved proposed drawing corrections submitted on July 11, 2003 because they allegedly introduce new matter into the drawings under 37 C.F.R. 1.121(a)(6). According to the Examiner, the original disclosure is unclear as to what element corresponds to the sealing flange in the original disclosure and that the original disclosure does not support reference character 42 corresponding to a sealing flange as shown in corrected FIGS. 1 and 3.

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FIGS. 1 and 3 have been corrected to show sealing flange 42. Applicants respectfully reiterate that sealing flange 42 as shown in corrected FIGS. 1 and 3 is supported in the original disclosure. It is clear from the original disclosure that sealing flange 42 is a flange that is "attached to the inner surfaces of the walls [of the frame], the flange extending inwardly into the [frame] opening" as claimed. Regarding corrected FIG. 1, p. 8, l. 29-30 discloses "upstream face 118 [shown in original FIG. 1] of flange 42." Because upstream face 118 of flange 42 is shown in the original disclosure, flange 42 is also inherently shown in the originally filed disclosure. Corrected FIG. 1 also includes reference numbers 24 for the subassembly, and 116 for the foam seal. The addition of these reference numbers does not constitute new matter because they were described in the specification as originally filed.

Regarding corrected FIG. 3, the description, as amended, says that FIG. 3 "is a cross-sectional view of the frame and the inwardly extending flange with the foam tape and the subassembly in place." Thus it is clear that frame 40, as shown in FIG. 3 of the original disclosure, has an inwardly extending flange, as described in the description of FIG. 3. Flange 42 is the only flange described in the description so that it is clear that flange 42 is the inwardly extending flange shown in corrected FIG. 3. Additionally, p. 8, l. 9-10 discloses "that foam 116 is between perimeter 28 and flange 42," so that there is support for foam 116, which is shown in FIG. 3 of the original disclosure, being between flange 42 and subassembly face perimeter 28, as shown in corrected FIG. 3. Thus, corrected FIG. 3 is supported.

In addition to the changes regarding flange 42, corrected FIG. 3 also includes reference number 26 to indicate the subassembly face and reference number 28 to indicate the perimeter of the subassembly face and reference number 150 for the direction of air flow. Applicants' original disclosure teaches a flange 42 being sealed against a perimeter 28 of subassembly face 26, wherein perimeter 28 is part of the subassembly face 26, as shown in FIG. 2 wherein reference character 28 points to a portion of subassembly face 26. Further, as described in the specification, FIG. 3 "is a cross-sectional view of the frame and the inwardly extending flange." As is clear from corrected FIGS. 1 and 4, the subassembly 24 is placed within frame 40 so that it is abutted against flange 42 so that subassembly face 26 faces into the direction of air flow

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150. Therefore, the orientation of subassembly 24 within frame 40 would position subassembly face 26 as shown in corrected FIG. 3, with perimeter 28 being in contact with foam 116. Therefore, subassembly face 26, perimeter 28, and direction of air flow 150 as shown in corrected FIG. 3 do not constitute new matter.

Also, the original drawings have been objected to as not showing a seal between the subassembly face and the flange, that the seal between the flange and the subassembly face comprises foam between the subassembly face and the flange, or that the seal between the face of the subassembly and the flange is a metal-to-metal seal. Corrected FIG. 3 shows a seal 108 comprising foam 116 between flange 42 and perimeter 28 of subassembly face 26, which were also shown in the originally disclosed FIG. 3. New FIG. 6 has been added to show a metal to metal seal 117 between flange 42 and subassembly face 26. New FIG. 6 does not constitute new matter because a metal to metal seal between flange 42 and subassembly face 26 is described in the original specification on p. 8, l. 22-23 which discloses that "[t]he use of foam, however, is optional and may be eliminated if one desires a metal to metal seal between subassembly 24 and flange 42." A brief description of new FIG. 6 has been added to the "Brief Description Of The Several Views Of The Drawings" section, as shown above.

The Examiner has also objected to the original drawings because four reference signs appear to point towards a single element in FIG. 4, and because the drawings do not include reference signs described in the description.

FIG. 4 has been corrected to show the differences between reference signs 70, 72, 74 and 76. Reference signs 70 and 72 refer to the lips of radiator 20, and reference signs 74 and 76 refer to the lips of charge air cooler 22 (Specification p. 6, l. 3-7).

Reference signs that have been added to the figures include reference sign 42 for the sealing flange in FIGS. 1 and 3, reference sign 50 for the downstream face of radiator 20 and reference sign 60 for the charge air cooler downstream face in FIG. 4, and reference sign 104 for the gap between the subassembly and the frame in FIG. 3. Reference character 118 for the upstream face of sealing flange 42 was shown in the originally disclosed FIG.1, and is included in corrected FIG. 1.

Four sheets of corrected drawings are filed herewith to overcome the objections to the drawings. The corrected sheets of drawings include corrected FIGS. 1, 3, and 4,

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formal FIGS. 2 and 5 to replace the informal figures filed with the original disclosure, and new FIG. 6. Formal FIGS. 1-6 do not constitute new matter because the changes were shown or described in the application as originally filed.

For the foregoing reasons, Applicants respectfully request reconsideration and withdrawal of the objections to the drawings.

Claim Objections

The examiner has objected to claims 1-13 because of the phrase "for mounting in a path of environmental air flowing in a direction of air flow" is allegedly redundant, unclear and grammatically incorrect as written. Claims 1, 3 and 6 have been amended as shown above to overcome the objection regarding informalities, accordingly, it is respectfully requested that the objection be reconsidered and withdrawn.

Claim Rejections – 35 U.S.C. § 112

Turning now to the claim rejections under Section 112, paragraph 1, claims 3-8 and 11-13 stand rejected as allegedly containing subject matter not described in the specification. In particular, according to the Examiner, there is not support for a seal between the flange and the subassembly face, but rather only for a seal between the flange and the perimeter of the subassembly face.

Claims 3-8 and 11-13 also stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly failing to set forth subject matter which Applicants regard as their invention.

Claims 3, 5, 6, 8, and 12 have been amended as indicated above to indicate that the seal is between the perimeter of the subassembly face and the flange, as claimed in the original disclosure. The amendment carries through to dependent claims 4, 7, 11, and 13. As indicated by the Examiner, there is support for a seal between the flange and the perimeter of the subassembly face, accordingly, it is respectfully requested that the rejection to claims 2-8 and 11-13 be reconsidered and withdrawn.

Claim 7 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite. According to the Examiner, "the step of connecting the radiator to the charge air cooler is releasable" is unclear as written. Claim 7 has been amended as shown above to more clearly point out that the step of connecting the radiator to the charge air cooler is

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done with nuts and bolts. Accordingly, it is respectfully requested that the rejection to claim 7 be reconsidered and withdrawn.

Claim Rejections – 35 U.S.C. § 102

Turning now to the claim rejections as to anticipation under Section 102, claims 1-4, 6, 7, 9, 11 and 13 stand rejected for alleged lack of novelty.

Claims 1 and 9 Patentable Over Williams

Claims 1 and 9 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Williams (U.S. Patent 4,736,727). Williams discloses a radiator assembly 44 and a charge air cooler 60 with faces that are staggered so that they are not coplanar (see Williams FIG. 3).

Claim 1 has been amended to include the limitations of a side of the radiator being connected to a side of the charge air cooler, and that the radiator face and the charge air cooler face are aligned substantially in the same plane. Support for the amendment can be found in the specification in FIGS. 1, 2, and 4, and in the original claim 1.

Amended claim 1 is patentable because, *inter alia*, Williams does not teach or suggest a subassembly for a cooling package for use in an agricultural combine including a radiator having a face and a side, a charge air cooler having a face and a side, wherein the side of the charge air cooler is connected to the side of the radiator to form a subassembly face comprising the radiator face and the charge air cooler face, wherein the radiator face is aligned substantially in the same plane with the charge air cooler face, and to form a seal between the radiator and the charge air cooler and wherein there are no leak paths between the radiator and the charge air cooler.

Claim 9, as amended, depends from amended claim 1, and is therefore patentable over Williams for at least the same reasons as amended claim 1. Amended claim 9 also adds the additional limitation of the seal being formed between the side of the radiator and the side of the charge air cooler.

Therefore, Williams neither teaches nor suggests Applicants' invention as claimed in claims 1 and 9, as amended, accordingly, it is respectfully requested that the rejection be reconsidered and withdrawn.

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Claims 1, 2 and 9 Patentable Over Hedeen

Claims 1, 2 and 9 stand rejected under § 102(b) as allegedly anticipated by Hedeen (U.S. Patent 5,316,079). Hedeen discloses an "integrated heat exchanger" wherein radiator tubes 66 and charge air cooler tubes 72 are combined in the same heat exchanger 34.

Amended claim 1 is patentable over Hedeen because, *inter alia*, Hedeen does not teach or suggest a subassembly for a cooling package for use in an agricultural combine including a radiator having a face and a side, a charge air cooler having a face and a side, wherein the side of the charge air cooler is connected to the side of the radiator to form a subassembly face comprising the radiator face and the charge air cooler face, wherein the radiator face is aligned substantially in the same plane with the charge air cooler face, and to form a seal between the radiator and the charge air cooler and wherein there are no leak paths between the radiator and the charge air cooler.

Claims 2 and 9 depend from claim 1, and are therefore patentable over Hedeen for at least the same reasons as claim 1. Further, Hedeen does not teach or suggest a seal formed between the sides of the radiator and the charge air cooler, as required by claim 9, or the sides of the radiator and charge air cooler having extending lips that are bolted together to connect the radiator and charge air cooler, as required by claim 2.

Therefore, Hedeen neither teaches nor suggests Applicants' invention as claimed in claims 1, 2 and 9, as amended, accordingly, it is respectfully requested that the rejection be reconsidered and withdrawn.

Claims 1-4, 6, 7, 9, 11, and 13 Patentable Over Struss

Claims 1-4, 6, 7, 9, 11, and 13 stand rejected under § 102(b) as allegedly anticipated by Struss et al. (U.S. Patent 4,651,816). Struss discloses a heat exchanger module having securing strips or bars 18 for connecting two heat exchangers 12, 14 together and to a fan shroud 10 wherein "[t]he bar 18 is used... to secure the heat exchangers 12 and 14 in side by side, but spaced apart relation" (col. 3, l. 46-49), so that there is not a seal between the heat exchangers 12 and 14. Heat exchangers 12 and 14 are connected to shroud 10 using connector bars 20, but Struss does not teach a frame with

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an inwardly extending flange with a seal between the shroud 10 and the heat exchangers 12 and 14.

Amended claim 1 is patentable because, *inter alia*, Struss does not teach or suggest a subassembly for a cooling package for use in an agricultural combine including a radiator having a face and a side, a charge air cooler having a face and a side, wherein the side of the charge air cooler is connected to the side of the radiator to form a subassembly face comprising the radiator face and the charge air cooler face, wherein the radiator face is aligned substantially in the same plane with the charge air cooler face, and to form a seal between the radiator and the charge air cooler and wherein there are no leak paths between the radiator and the charge air cooler.

Claims 2 and 9 depend from claim 1, and are therefore patentable for at least the same reasons as amended claim 1. Further, claim 9 adds the limitation of a side of the radiator being connected to a side of the charge air cooler, wherein the seal is formed between the sides of the charge air cooler and the radiator. Claim 2 adds the limitation of the sides having extended lips and that the sides of the charge air cooler and the radiator are connected together by bolting the extended lips together.

Claim 3 has been amended to clarify that the seal is between the flange and the perimeter of the subassembly face. Applicants' original disclosure teaches a flange 42 being sealed against a perimeter 28 of subassembly face 26, see corrected FIG. 3, wherein perimeter 28 is part of the subassembly face 26, as shown in FIG. 2 wherein reference character 28 points to a portion of subassembly face 26. Thus, the specification supports the flange 42 sealing against perimeter 28, which is part of subassembly face 26.

Further, Applicants' original claim 3 stated that "the perimeter of the [subassembly] face seals against the flange." Applicants note that the "claims in an application are to be given their broadest reasonable interpretation **consistent with the specification**" (emphasis added) *In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385 (Fed. Cir 1983) citing In re Prater, 56 CCPA 1381, 415 F.2d 1392, 1404 (CCPA 1969).* The interpretation that "perimeter" is an area around the outside of the subassembly face that is part of the subassembly face is consistent with the specification. This interpretation is similar to a perimeter of a city which is part of the city itself (see Webster's Third

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International Unabridged Dictionary, p. 1680 (3rd ed. 1993) which says that a perimeter can be a "strip bounding or protecting an area").

Claim 3 as amended is patentable because, *inter alia*, Struss does not teach or suggest a cooling package for use in an agricultural combine including a frame having walls that define an opening, each wall having an inner surface, a flange attached to the inner surfaces of the walls, the flange extending inwardly into the opening, a radiator having a face, a charge air cooler having a face, wherein the radiator is connected to the charge air cooler in order to form a subassembly, the subassembly having a face with a perimeter, the subassembly face comprising the radiator face and the charge air cooler face, the subassembly being mounted in the opening of the frame, there being a seal between the perimeter of the subassembly face and the flange, wherein there are no leak paths around the perimeter of the subassembly face.

Claims 4 and 11 depend from claim 3, as amended, and are therefore patentable over Struss for at least the same reasons as amended claim 3. Further, claim 11 adds the additional limitations of a the radiator having a side that is connected to a side of the charge air cooler, and claim 4 adds the additional limitations of the sides of the radiator and the charge air cooler having extended lips and that the sides are connected by bolting the extended lips together.

Claim 6 has been amended to clarify that the sealing is between the flange and the perimeter of the subassembly face. As described above, Applicants' specification supports this amendment.

Claim 6, as amended, is patentable because, *inter alia*, Struss does not teach or suggest a method of manufacturing a cooling package for use in an agricultural combine, including the steps of, providing a frame having walls that define an opening, each wall having an inner surface, attaching a flange to the inner surfaces of the walls so that the flange extends inwardly into the opening, providing a radiator having a face, providing a charge air cooler having a face, connecting the radiator to the charge air cooler to form a subassembly with a face having a perimeter, the subassembly face comprising the radiator face and the charge air cooler face, mounting the subassembly into the opening of the frame, and sealing the perimeter of the subassembly face against the flange so that there are no leak paths around the perimeter of the subassembly face.

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Claims 7 and 13 depend from claim 6, as amended, and are therefore patentable over Struss for at least the same reasons as amended claim 6. Further, claim 7 adds the additional limitations of the connection step being done with nuts and bolts and claim 13 adds the additional limitations of the radiator having a side and the charge air cooler having a side, wherein the connecting step includes connecting the radiator side to the charge air cooler side.

Therefore, Struss neither teaches nor suggests Applicants' invention as claimed in claims 1-4, 6, 7, 9, 11 and 13, as amended, accordingly, it is respectfully requested that the rejection be reconsidered and withdrawn.

Claim Rejections – 35 U.S.C. § 103

Turning now to the rejections of obviousness under section 103, claim 10 stands rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Williams.

Claim 10 is patentable over Williams because, *inter alia*, Williams does not teach or suggest a subassembly for a cooling package for use in an agricultural combine including a radiator having a face and a side, a charge air cooler having a face and a side, wherein the side of the charge air cooler is connected to the side of the radiator to form a subassembly face comprising the radiator face and the charge air cooler face, wherein the radiator face is aligned substantially in the same plane with the charge air cooler face, and to form a seal between the radiator and the charge air cooler and wherein there are no leak paths between the radiator and the charge air cooler, as required by claim 1, with the additional limitation of the seal between the radiator and the charge air cooler being a metal to metal seal, as in claim 10.

Thus, Williams does not teach or suggest Applicants' invention as claimed in claim 10, accordingly, it is respectfully requested that the rejection be reconsidered and withdrawn.

Claims 5, 8, and 12 Patentable

Claims 5, 8, and 12 stand rejected as allegedly unpatentable. However, the Examiner has provided no evidence that claims 5, 8, and 12 are anticipated or obvious in view of the prior art.

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Claim 5 is patentable because, *inter alia*, none of Williams, Hedeen, or Struss, alone or in any proper combination, teach or suggest a cooling package for use in an agricultural combine including a frame having walls that define an opening, each wall having an inner surface, a flange attached to the inner surfaces of the walls, the flange extending inwardly into the opening, a radiator having a face, a charge air cooler having a face, wherein the radiator is connected to the charge air cooler in order to form a subassembly, the subassembly having a face with a perimeter, the subassembly face comprising the radiator face and the charge air cooler face, the subassembly being mounted in the opening of the frame, there being a seal between the perimeter of the subassembly face and the flange, wherein there are no leak paths around the perimeter of the subassembly face, as required by claim 3, with the additional limitation of the seal between the face of the subassembly and the flange comprising foam between the subassembly face and the flange, as in claim 5.

Claim 8 is patentable because, *inter alia*, none of Williams, Hedeen, or Struss, alone or in any proper combination, teach or suggest a method of manufacturing a cooling package for use in an agricultural combine, including the steps of, providing a frame having walls that define an opening, each wall having an inner surface, attaching a flange to the inner surfaces of the walls so that the flange extends inwardly into the opening, providing a radiator having a face, providing a charge air cooler having a face, connecting the radiator to the charge air cooler to form a subassembly with a face having a perimeter, the subassembly face comprising the radiator face and the charge air cooler face, mounting the subassembly into the opening of the frame, and sealing the perimeter of the subassembly face against the flange so that there are no leak paths around the perimeter of the subassembly face, as required by claim 6, with the additional step of attaching foam to the flange in order to ensure a positive seal between the subassembly face and the flange, as in claim 8.

Claim 12 is patentable because, *inter alia*, none of Williams, Hedeen, or Struss, alone or in any proper combination, teach or suggest a cooling package for use in an agricultural combine including a frame having walls that define an opening, each wall having an inner surface, a flange attached to the inner surfaces of the walls, the flange extending inwardly into the opening, a radiator having a face, a charge air cooler having a

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face, wherein the radiator is connected to the charge air cooler in order to form a subassembly, the subassembly having a face with a perimeter, the subassembly face comprising the radiator face and the charge air cooler face, the subassembly being mounted in the opening of the frame, there being a seal between the perimeter of the subassembly face and the flange, wherein there are no leak paths around the perimeter of the subassembly face, as required by claim 3, with the additional limitation of the seal between the subassembly face and the flange being a metal to metal seal, as in claim 12.

Therefore, none of Williams, Hedeen, or Struss, alone or in any proper combination, teaches or suggests Applicants' invention as claimed in claims 5, 8, and 12, accordingly, it is respectfully requested that claims 5, 8, and 12 be considered and allowed.

If the Examiner believes it would help to advance the prosecution, the undersigned agent would welcome the opportunity to discuss the application in a further telephone interview and can be reached at (312) 201-0011.

For the foregoing reasons, Applicants respectfully request reconsideration and allowance of all claims as amended.

Respectfully submitted,

Dated this 25th day of November, 2003.

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